

**WE CLAIM:**

- Sub 02
1. A method of driving an LCD, comprising
    - (i) providing an array of pixels;
    - (ii) by the steps of providing cholesteric liquid crystals arranged between spaced transparent substrates; and
    - (iii) by providing a reset pulse and a plurality of selection pulses whereby to provide resultant driving waveform(s).
  2. A method as defined in Claim 1, wherein the selection pulses comprise amplitude modulated selection pulses.
  3. A method as defined in Claim 2, wherein the selection pulses are multiple selection pulses of variable amplitudes of determined pulse width.
  4. A method as defined in Claim 1, wherein there is a multiplex addressing driving waveform and a reset pulse selected from a group consisting of a pipeline and non-pipeline arrangement.
  5. A method as defined in Claim 4, wherein partial rows are pipelined.
  6. A method as defined in Claim 4, wherein partial rows are non-pipelined.
  7. A method as defined in Claim 1, wherein voltages of the reset pulses are at least no smaller in value than the reset voltage provided by the reflective property cholesteric liquid crystal.
  8. A method as defined in Claim 7, wherein the reset pulses are greater

than the reset voltage.

9. A method as defined in Claim 1, wherein the selection pulses of the multiplex driving waveform are arranged in groups selected from clustering together, interleaving with other rows, and a combination of said clustering and said interleaving.

10. A method as defined in Claim 9, wherein the voltages of the selection pulses have absolute values between the threshold voltage and the voltage of the property of minimum reflectivity of the liquid crystal.

11. A method as defined in Claim 1, wherein the driving waveform(s) have instantaneous polarity inversion after each pulse in the driving waveform.

12. A method as defined in Claim 11, wherein an opposite polarity of equal magnitude is added to each pulse in the frame period.

13. A method as defined in Claim 1, wherein at least some of the pulses of the driving waveform are polarity reversed in the frame period.

14. A method as defined in Claim 1, wherein the polarity of a succeeding pulse of the driving waveform is opposite the polarity of the immediately preceding (instant) pulse.

15. A method as defined in Claim 14, wherein the arrangement of the multiple selection pulses of a succeeding frame period is different from the instant pulse.

16. A method as defined in Claims 13 and Claim 14 wherein there is a

09847570-050201

common driving waveform comprising a combination of said waveforms.

17. A method as defined in Claim 1, wherein there is a gray scale generated by adjusting appropriate voltage levels of the multiple selection pulse of said waveform(s).

18. A method as defined in Claim 17, wherein the gray level is determined by respective voltage levels having absolute values between the threshold voltage and the voltage of minimum reflectivity with respect to the reflectivity property of the cholesteric liquid crystal.

19. A method as defined in Claim 1, wherein the voltage level of all pulses in the driving waveform(s) is determined by the pulse width of reflectivity property of the cholesteric liquid crystal.

09847570.050201